CBOR tags for IPv4 and IPv6 addresses and prefixes

draft-ietf-cbor-network-addresses-00
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https://github.com/mcr/cbor-network-address
Background

• Tag 260 and 261 exist.
• 260: IPv4 (if 4-bytes), IPv6 (if 16-bytes), Ethernet (if 6-bytes).
  - What about 8-byte Ethernet?
  - Forced to send 16 bytes, when many might be zeros.
• 261: seems to apply to maps, but prefixes in groups can be repeated, while keys should not be.
  - Also would be nice to know prefix length first.
  - Too complicated, not well enough documented
Proposed IPv6 tag

IPv6 Address

TBD1( 
  h'20010db81234abcd'
  000000000000coffeее'
)

SUBNET

TBD1( 
  [ 64, 
  h'20010db81234'
  ]
)

Proposed IPv4 tag

IPv4 Address
TBD2(h'0000201')

SUBNET
TBD2([24,
h'00002',])


Issues and Next Steps

- What about arrays of addresses or prefixes?
  - not personally interesting
  - could be accommodated.

- Adopted March 3, 2021
- Ask for Early Allocation of tags.
  - Is a 1+1 tag justified?
- get immediate review
Conclusion

Either publish now, or:
could be merged into “notable tags”, if WG agrees to do early allocation of tags.

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